

**Project #3**  
**Due Sunday 2/15/2015 by 11:59 PM**  
**No delay is accepted**

**For each day late submission 2 points penalty is incurred.**  
**Post your answer in the folder *Project3 on the blackboard*.**  
**If you have any question please email me at [mbadii@pace.edu](mailto:mbadii@pace.edu)**

**Note: Do not email me your project for grading. Only email your project to me when you need help and have questions. In this case attach your project and describe what your questions are.**

For this week project I am asking to implement two scripts from the exercises in lecture

2. Copy and paste your program under the word: **Answer**.

**1. (This is Exercise 6 in lecture 2):** Write a script, using if-else to produce a random number and display either one of the following outputs:

**A random number between 0 and less than 0.5.**

x is a decimal number between 0 and less than 0.5.

We are using random number of the Math object

This message is not part of the if-else statement

**Or:**

**A random number between 0.5 and less than 1**

x is a decimal number between 0.5 and less than 1.

We are using random number of the Math object

This message is not part of the if-else statement

Note that by 'x' I mean a number. For example if the random number generator generates 0.8123, your program should display the following:

**A random number between 0.5 and less than 1**

0.8123 is a decimal number between 0.5 and less than 1.

We are using random number of the Math object

This message is not part of the if-else statement

**Hint:** In this program you should have two write-instructions for the if-part and two write-instructions for the else-part, and two write-instructions, which are out of if-else, to display the last two lines.

**Answer:**

```

<html>
<head>
  <title>Project 3</title>
</head>
<body>

  <script type="text/javascript">

    var n = Math.random();

    if(n >= 0 && n < 0.5)
    {
      document.write("<b>A random number between 0 and less than 0.5.</b>
<br>");
      document.write(n.toFixed(3) + " is a decimal number between 0 and less
than 0.5. <br>");
    }
    else if(n >= 0.5 && n < 1)
    {
      document.write("<b>A random number between 0.5 and less than 1.</b>
<br>");
      document.write(n.toFixed(3) + " is a decimal number between 0.5 and less
than 1.<br>");
    }

    document.write("We are using random number of the Math object <br>");
    document.write("This message is not part of the if-else statement <br>");
  </script>
</body>
</html>

```

**2. (This is Exercise 9 in lecture 3):** Write a script with a while-loop using *font* and *size* to display the following:

```

Hello
Hello
Hello
Hello
Hello
Hello
Hello
Hello

```

**Answer:**

```
<html>
<head>
  <title>Project 3</title>
</head>
<body>

  <script type="text/javascript">
    var i = 1;

    while(i <= 7)
    {
      document.write("<font size = "+i.toString()+>Hello</font><br>");
      i++;
    }
  </script>
</body>
</html>
```

3. (This is **Exercise 10 in lecture 3**): Write a script with a while-loop to display the following:

Hint: Use the function `rgb(..., ..., ...)` from lecture 2.

**Hello**

**Hello**

**Hello**

**Hello**

**Hello**

**Hello**

**Hello**

**Hello**

**Hello**

Hello

**Answer:**

```
<html>
<head>
  <title>Project 3</title>
</head>
<body>

  <script type="text/javascript">
    var i = 0;
    var r = 250, g = 0;
    while(i <= 10)
    {
      document.write("<b><span style = \"color: rgb(" + r + \",\" + g + \",0);\">
Hello </span> </b><br>");
      r = r - 20;
      g = g + 20;
      i++;
    }

  </script>
</body>
</html>
```